

**Vocabulary Task Force**  
**Draft Transcript**  
**April 22, 2011**

**Presentation**

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Good afternoon, everybody, and welcome to the Vocabulary Taskforce. This is a Federal Advisory Committee, so there will be opportunity at the close of the call for the public to make comment.

Let me do a quick roll call: Jamie Ferguson.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Present.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Betsy Humphreys.

**Betsy Humphreys – National Library of Medicine – Deputy Director**

Present.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Clem McDonald.

**Clem McDonald – Regenstrief – Director & Research Scientist**

Here.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Marjorie Rallins.

**Marjorie Rallins – AMA – Director, CPT Clinical Informatics**

Present.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Stan Huff.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

Present.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Chris Chute. Marc Overhage. Daniel Vreeman.

**Daniel Vreeman – Regenstrief Institute – Research Scientist**

Present.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

John Klimek. Floyd Eisenberg. Karen Trudel. Don Bechtel.

**Don Bechtel – Siemens Medical – IT Architect, Standards & Regulatory Mgr.**

I'm here.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Patty Greim. Jim Walker. Andy Wiesenthal. Bob Dolin. Ram Sriram.

**Ram Sriram – NIST – Manufacturing Systems Integration Division**

Present.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Lynn Gilbertson.

**Lynn Gilbertson – NCPDP – Vice President of Standards Development**

Present.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Nancy Orvis. Marjorie Greenberg.

**Marjorie Greenberg – NCHS – Chief, C&PHDS**

Here.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Did I leave anyone off? All right, with that I'll turn it over to Jamie Ferguson.

**Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant**

This is Floyd Eisenberg just joined after you probably called my name.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Yes. Thank you, Floyd.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Hello, everybody. Welcome to Good Friday. For today's call, what I was hoping we could do is to discuss the summer camp presentation that the Standards Committee had from Doug Fridsma earlier this week, and what it means for us particularly in the Vocabulary Taskforce. There are a number of recommended task items in there for the Standards Committee to consider. While many of them have been proposed to be scheduled for recommendations that would come later in the summer, at the same time I think we want to talk about sort of our priorities, how we want to spend resources. Also whether there is some sort of low hanging fruit where we could make recommendations earlier in the cycle so that the reg writers, if you will, for stage two of meaningful use and the certification criteria that go along with that can have something to get started on.

Then also in the Standards Committee meeting this week, ONC recommended that the Standards Committee establish different task groups for different sub areas of work within the overall agenda of what they'd like to have accomplished for stage two. So I think we should consider how we want to structure ourselves for that and if any other sort of sub task groups may be required.

That's the agenda that I had hoped we could cover on this call. Does that sound good? Is there anything missing? Is that too ambitious?

**M**

Sounds good, Jamie.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Okay. Thank you. So I was hoping that Doug Fridsma would be able to join us on this call, and he may dial in in a short while.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

I'm here, Jamie.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

All right, so this is the Vocabulary Taskforce. Do you want to give us the overview of sort of the buckets and the overview of the summer camp presentation in a thumbnail sketch?

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Sure, I can do that. I don't know, Judy, if we want to— Okay, there, you have slides up. We'll go through this fairly quickly, because a lot of this was presented on Wednesday and many people, I think, were probably in attendance, or at least have had an opportunity to look at that. But I'll try to debrief as we go through and focus primarily on the vocabulary concerns.

One of the things that we were trying to queue up is that after the HIT Policy Committee had sort of had their meeting last week we went through and tried to begin the process of identifying where there were potentially certification criteria standards, vocabularies, terminologies, and implementation guides that might need to be identified to help meet some of the policy objectives. Now for some of them we realize that under stage one of meaningful use we may need to make some adjustments and changes in attesting scripts and the way in which the certification criteria were designed. So there's some work that needs to be done from meaningful use stage one going into meaningful use stage two that help us update the work.

We also have to try to identify where we need additional work done, and I think the goal that we had is to begin to converge on a set of standards, specifications, vocabularies that will help us get to the goal of interoperability. We probably need to do some triage work early on, because we have a lot of work to accomplish in kind of a limited amount of time given the regulatory cycle, and so we really have to think about using all the tools at our disposal and distributing the work so that we can get it accomplished. So that means there may be some situations in which we need to hold hearings, we can use the Federal Register to get public input, we have wikis that provide a more informal way, and then we have work that can be accomplished using the S&I framework.

As I said, there's a refresh and reload, which means we need to potentially revise some of the current certification criteria. We may need to recommend new updated standards and implementation specifications, and then given the work that's gone on with the Meaningful Use Group, identify and draft any new certification criteria and the associated standards and implementation specifications and the like.

So one of the things that we thought we needed to do early on is to create kind of a quick triage if we can. What I mean by that is that over the course of the next couple weeks we need to really try to figure out, given the stuff that the Meaningful Use Group is working on, what things do we need standards. What things are certification criteria or performance measures for which we don't need any existing standards or there doesn't need to be an update or refresh of existing criteria? Some places in which there may be new requirements that would require the identification of standards and implementation guides, some of which may already be fairly robust and in use and we can just recommend those.

But the real action, I think, is going to happen within C&D in the sense that if there is an existing standard but no implementation guide or if there's additional work that needs to be done, either with getting public input or making modifications, that's where we might be able to leverage some of the work in the working groups and in the S&I framework to kind of help. Finally, there may be some situations in which the policy objectives, although laudable, may not have the necessary maturity in the standards to support that and I think it's important to understand and to identify that early. Because it may be possible with some suggestions from the Standards Committee or some changes in the meaningful use policy objectives to be able to get us a lot closer to those objectives, even if there isn't an existing standard that exists.

So I'm not going to go through all of these various buckets. I'd rather, I think, maybe go to— People, I think, have been distributed the slides. So let's go through bucket A and go to the next one. I want to just kind of get through the various buckets, and B and C and D and E and F. There. So one of the things that I wanted to do is just give kind of a high-level overview of the various things that we need to try to accomplish, and then to try to focus primarily on the vocabularies and the terminology issues.

We have a bunch of things that we need to take a look at. I think that for us to be successful in getting to the goal of interoperability we need to really start examining not just what the transport looks like or not just what the package looks like, but to actually start looking at what the vocabularies and terminologies—

those things that fit into the slots, if you will, within the package. Try to identify what those things look like so that we can begin to get to the point where the transition of care document that is exchanged between two different institutions the information in there that may contain drug information or laboratory test information can be used for decision support or for other things as it gets exchanged across that.

So as we review the existing standards and we take a look at some of the emerging standards and the work that's going on within the S&I framework, primarily around lab results and transitions of care, we really should take a look at those initiatives and those standards and try to identify. I know we break the world into different sections, but one is to identify the vocabulary or terminology that would be used to support that particular element. So problem lists in meaningful use stage one for the C32 we identified that both ICD-9 and SNOWMED could be used for problem lists. We also talked about within the final rule about the desire to begin reducing the number of options and start to converge on a singular set of standards, and I think that also includes the vocabularies as well.

So I think, as you take a look at this timeline, I have a discussion or I had kind of penciled in in August a review of vocabulary. But as I said on Wednesday, I don't anticipate that we're just going to wait until August before we have any sort of work or any sort of presentations about these vocabularies, but in fact, we probably need to think across the existing standards. Like a formulary you need prescribing or emerging standards around longitudinal care plans, directory certificates; if there are any vocabularies or value set issues that we need to address we should do that as part of those initiatives. Certainly I know within the laboratory initiative in the standards and interoperability framework, as well as in the transitions of care, that's a tremendous opportunity for us to have the full suite, if you will, of possible tools that says here is a transition of care or here is a laboratory standard. Here are the vocabularies and terminologies that we think are important, and maybe we reduce some of the optionality so that we begin to converge on singular vocabularies for particular domains.

Then, finally, we may want to think about if what we do is choose a particular vocabulary for a particular domain—so we choose between ICD-9 and SNOMED, what do we need to do. Are there additional tools, are there additional work that we need to do that would increase the success rate for people who, as we know, are moving from ICD-9 to ICD-10, are trying to meet the needs of meaningful use, and there's a lot of activity. One of the things that we might need to do that will make it easier for people to converge on a singular vocabulary for a particular domain perhaps limit the scope of what it is that we are expecting, but still gives a strong message directionally where we want to go in terms of converging on those vocabularies and those terminologies. I would suggest probably the best way to do that is to make a vocabulary, those assessments, part of each of these initiatives and the review of the standards, and making sure that we have dedicated time within the HIT Standards Committee schedule to review those suggestions in the setting of the standards that might be proposed.

With that, I turn it over to you, Jamie, and the rest.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Well thank you, Doug. I think that's very helpful. In fact, I just recently went back and reviewed the previous recommendations that we had made back in 2009 for the stage one of meaningful use. The initial set of recommendations actually did exactly what you just described in terms of setting that trajectory or that glide path. What we recommended initially was that for implementation in 2011 for stage one that—for example I'll pick on problem lists. We had said that SNOMED CT could be used or ICD-9 for 2011 and 2012, we had said that for 2013 and 2014 that either SNOMED or ICD-10 should be used, but that for 2015 we recommended what we called a directional statement of intent for 2015 that there would be mandatory SNOMED CT documentation of problems in 2015. So I wonder if specifically for problems, labs, meds, and units of measure, we actually previously made exactly those kinds of recommendations with timing recommendations where actually we had also recommended that both LOINC and UCUM should be required for stage two. I wonder, given that those were the previous recommendations, what do you think is appropriate to either validate those or revisit; what do folks think about that?

**Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant**

Jamie, can I also ask for clarification? I know this taskforce has spent a lot of time just trying to define terms, and I'm still hearing terms that to me sound somewhat confusing. I'm hearing vocabularies, I'm hearing value sets, and in this taskforce, we defined there are value sets that are basically convenience sets or subsets of larger terminologies and there are other value sets that are very specific to individual data element usage. I think it would be really helpful in this whole discussion if we kept to a standard definition and knew exactly what we're referring to.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Okay.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Floyd, I don't make a distinction between convenience sets and value sets.

**Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant**

But that's problematic for the folks in the quality community and clinical decision support, because there is a distinction there. That's the problem.

**Betsy Humphreys – National Library of Medicine – Deputy Director**

I think that there's also the issue of convenience for implementers. We were having a conversation about this at NLM earlier today. For example, if you have a convenience set because it's frequently occurring, we were dealing with this in terms of orders and results, or up casts actually but we could do it with problems as well. If you have a frequently occurring set than you probably want to privilege that set in terms of data entry making it more likely that providers as they key in letters would see something that they could pick from that frequently occurring set. Then you have other sets that you need in order to cover the bases for public health, for example the reportable conditions, which may not be frequently occurring. So this is just to point out that when we're trying to package things in ways that help people implement we were having the discussion earlier that it may not help implementers to put them all in the same place or in the same file. Or at least we need to distinguish them so that they know that here's one that will help you when you're implementing on set of tasks, which might be data entry, and here's one that will help you so you can interpret or deal with any reportable conditions.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

A somewhat different issue, but the creation of value sets and the selection of terminologies that you use is highly context dependent. Just for an example, it's not enough actually even to say for drugs we're going to use RxNorm. But if you're really going to be useful and interoperable you need to say, for instance, is this a drug that's being ordered, a drug that's being given, is this a drug that you're recording an allergy to, because those are all talking about drugs but they're actually different subsets of concepts related to drugs. I wonder in this are we going to get to that level where we're actually identifying the context specifically enough that we can really be discrete and concrete and interoperable about the value sets that we create?

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Yes. Stan, thank you for that, because I think for this to be useful for certification it has to be tied to particular conformance tests or other tests in certification, doesn't it, and that defines the context for certification of the standards. Doug, do you think that that's the right way to be looking at it?

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

I want to make sure that we don't let perfect be the enemy of good, and take the path of least regret. So we should make choices that would prevent us to providing additional context, but if we create value sets or convenience sets, or whatever you want to call them, that are difficult to test, challenging to implement I think we run the risk that we will have pushback that will make it difficult to proceed. We have to be, I think, pragmatic and try to realize that the convergence or the movement towards an interoperable future is going to take a series of smaller steps, and I think we have to figure out what those steps need to be now so that we can kind of get people on the right path. So I think those are going to be kind of principals or those may be ways in which we can help organize this work. I think if we create, and it may be that we simply say that we are limiting ourselves to the following context, if you will, in identifying some of these

subsets. There are tremendous challenges out there in the industry in terms of the number of things that people have to change all at once, so we have to try to figure out how we can be part of the solution and not part of yet another problem.

**M**

Doug, can I ask a question on that? When Jamie presented what this group had done in 2009, which gave a fairly clear direct trajectory of what could be expected in each subsequent year based on what Stan presented in his comment. I think there's value in that, we indicate that based on all of these contexts that here is the trajectory of where it's going and for now what is required is this more limited set, but at least provide that trajectory so those folks who are working on what to do next with the future know what to do.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

I think what I've heard from the industry is that the more that they can have a sense for what's coming down the pike the easier it will be for them to plan. Now I don't have the previous recommendations right in front of me; perhaps that's something we can distribute to the group and have them take a look at. The items that you've described I think certainly make sense. I wonder if we were to take those things and to apply them to the specific data elements and the specific standards that are being proposed as part of meaningful use stage two we might be able to even put a finer point on that with respect to the kinds of value sets or the kinds of subsets that get identified. I think as well if this was done in 2009 it may be helpful to figure out since 2009 what has happened and are we in an environment in which we can accelerate things, are we in an environment in which some of our underlying assumptions may have changed in terms of what we thought people were going to adopt. I think those might be helpful going into meaningful use stage two to sort of say, again, sort of the current lay of the land.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Yes. So, Doug, if I can give an example of what I was thinking of in my comment about how we might do this through certification in sort of an incremental, stepwise fashion. Let's say that hypothetically we would determine a subset of, I'm just going to make up a number, 500 LOINC codes that in certification for stage two would be a required subset for certification testing for lab result reporting in a particular format. So we would call that a convenience subset, but that would be used for purposes of certification testing of the systems. But in fact, in the development of that subset it may not be necessarily just the 500 most frequently ordered tests as reported in HEDIS or something like that or another way of determining the subset. The subset may include tests that are also used in quality or performance measures in value sets for other purposes, but the context of use for certification would be just standardized result reporting. Then that would enable us to lay out a roadmap to say that in the future there might be testing for other context of use for LOINC.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Yes, I think one of the things about that approach, which is kind of nice as well, is that if we have identified again sort of that 80/20 rule or the 90/10 rule, however you'd like to apply it, and say that we think this is going to cover most of the kinds of transactions that we imagine. Then we want people to be able to handle these things effectively it also helps people triage their resources and say we use a proprietary way of tracking these things, but for those 500 we're going to create mappings that will allow us to sort of get to where we want to go.

I think the other thing that's really important when it comes to interoperability and our ability to sort of build year-to-year and add new context and things like that is that we do need to think about the ability to test that someone conforms to those 500 vocabulary elements. But also that they conform or they're able to not break when you send the 501<sup>st</sup> one that they weren't planning on. Or a way of representing things that are not part of the 80/20 split to make sure that there's a way of dealing with the 20% so that as we move from 80/20 to 90/10 to 99/1 the systems continue to be able to gracefully manage that. Both with the machine-readable ways but also ways to have exception handling that humans can get involved in.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

Can I make a comment? Just to clarify, I guess, maybe, from my point of view sort of the more value sets

you create the greater value you provide. It seems to be a little bit in contradistinction to what might be inferred from some of the things you said, Doug. So if we, for instance, made the decision and said we're going to use RxNorm for drugs that would be useful without question. If I'm an implementer, though, and somebody could say for interoperability purposes we're going to use this subset of RxNorm codes for all of the orderable drugs, all of the things that are valid to order, that's extremely more useful to me as an implementer. It keeps me from having to do that work myself to figure that out, because I don't want to make an ordering application that allows me to order things that are not orderable. So the more specific subsets that you make the greater value you're providing to the industry, as well as interoperability.

The thing that mitigates against making lots of value sets is our time and resources, not the value or the complexity of the system; making more value sets adds greater value and makes it more explicit and increases interoperability, and so we shouldn't not make value sets because we think that's creating complexity. We might not make them because we don't have enough time and resources to do it, and certainly, whatever we did do is a step down the right path and I think is on the path of least regret. But I don't think creating lots of value sets should be viewed as a complexity and a barrier, because I think it's quite the opposite.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

No, and if you had that impression then I misspoke. I actually do think that value sets are going to make it simpler for folks. I guess what I was essentially proposing was that if we want to have an incremental approach towards interoperability and we want to try to scale this and allow us to sort of migrate we realize—I get the question all the time. It's like when are we going to be done with this interoperability thing, to move on to the next, and I think we all know that interoperability is a process, it's not an end state, if you will.

**Clem McDonald – Regenstrief – Director & Research Scientist**

Jamie, I don't know when whose hands are up.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

So, Clem, go.

**Clem McDonald – Regenstrief – Director & Research Scientist**

Okay. So I'd like to reinforce what Stan said and what Betsy said earlier. There's a 500, if you say have a budget of 500 terms, the problem with pooling them across two different purposes is they're different audiences. Let's take the say laboratory reporting to an office versus reporting of reportable diseases, well from the perspective of reportable diseases they want every malaria test there could possibly be in that list so that they don't miss any of them. So you end up with this profusion of codes which is right and perfect for them but an office practitioner will probably order a malaria test once in his lifetime or maybe twice. I would urge those be split apart and let the budgets adjust for the need, because it's actually pretty easy to pull all the tests that might ever apply, and mostly 99% has to be laboratory to public health, not office practice to public health. So a big plea to separate those budgets.

The second thing is sometimes small is worse, so you might want to get a budget bigger for some purposes, though I hear the arguments and I understand the arguments. Because those of you who maybe remember back when we set up medical record systems, if you put out a medical record system that contain hemoglobin no one ever came to the trough, no one ever looked at it, because it's too small a fraction. You have all lab in there they started to come to it, and then as you get more and more stuff it became sort of a treasure. So there's some point at which you're not going to have enough usefulness, people won't care about it and they'll say it's goofy. Be sensitive to that.

**M**

Yes, we're probably just making rules for ourselves for tomorrow, but I think it's going to be all of us doing this.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Well, Stan, I really appreciate your comment about more value sets being more useful. Doug, what I

thought I heard you saying was that basically we can't make the certification testing overly complex, and so I wonder if there might be ways to propagate value sets that would not necessarily mean that they would be part of certification testing. In other words, that restrict certification testing initially to the convenience subsets, they may be large convenience subsets that are going to have a lot of broad utility for care coordination, and have another process for publishing value sets for other purposes that are not maybe yet in the certification process.

**Clem McDonald – Regenstrief – Director & Research Scientist**

Well I think the largest value set is the entire vocabulary, and that will cover any possible combination of any possible value set beyond that. We could make the recommendation that we simply, from a certification criteria, that the vocabulary is SNOMED and you can create however many value sets you might want to that are convenient, but you will be tested across potentially the entire range. That would require people that use proprietary systems or that use alternative vocabularies to be prepared to map the entire corporate set they use into those value sets. That's sort of one extreme.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

There might be a middle ground. If the proposed list, I'll say in terms of like 2,000 tests, and suggest that people pick from that set—the 500 that could be the most useful to them or whatever the number would be—where there would be sort of a larger set. Because you know allergists need it different in different parts of the country and there are things that vary, usage patterns and the like, so just a thought.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

I mean that's an interesting suggestion. It would be interesting how that plays out with regard to testing. Obviously, I mean to me, you really need to be able to have the ability. So if there are 2,000 that we think everybody should have a subset of, there are 500 out of that 2,000, it constrains the mapping problem. I think that's good, but from a testing perspective if two hospitals that need to exchange laboratory information as parts of its transitions of care have different subsets that they've identified that overlap significantly but they may have some that are not contained in the other one's subgroup. We then need to make sure that we test not only that someone can receive one that's on the 500 that they know about, but they also need to be tested on one of those that may not be part of that 500. That's the way you're going to get to sort of this robustness, because otherwise they'll get a code that's indecipherable. If they don't have a human readable version or if they don't have something else that allows them to recover from not having that vocabulary well mapped we would have to test on both sides, both codes that are in the subset and codes that are not.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

So, Doug, I think you're making an eloquent argument for making the conformance testing subset larger, like at the 2,000 level as opposed to at the 500 level.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

Yes, and I retract my suggestion. I could see how that wouldn't work; it takes subsets.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

But again, when we think about sort of creating an escalator or a path part of it is that there are parts of this that we really want people to be able to have coded vocabularies accessible, so maybe there are some things related to quality measures. Maybe there are some things related to clinical decision support. Maybe there are some things that we really think there needs to be. Because they're common and everybody is going to be ordering them or reporting on them, there's a set of codes that we just think everybody should be able to manage. But there's still the chance that someone who has an uncommon condition and gets an uncommon lab test if that gets included in a transition of care we need to make sure that the people that receive that on the other end don't break and not have that information accessible. So it could be that they need to include their proprietary, non-standard, human readable description of the test that they ordered so that at least the physician can look at the test and get some sense about what it is maybe that they were thinking about. I think you need to test both of those things or you're going to end up in a situation in which you create a brittle system that says the only things that you can say are those things that are on the list, and I think we need to have more flexibility.



**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

I'd assume that the current HL-7 to load things would be part of this, so that would sort of take care of it automatically; they'd send what they always send plus. That may be a wrong assumption; I just assumed that, because that's what you see a lot of now.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Yes, and I think that's probably not an unreasonable assumption, but I think as we go into stage two meaningful use remember stage one meaningful use we identified vocabularies and some alternatives to be used for problem lists. When it came to medications they had to be RxNorm mappable, so it was not as tightly constrained and it was sort of on the path towards, but not actually delivering on, interoperability. So we may need to make that explicit to say here are the codes that we think are really important, and we want everybody to be able to include those.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

Well getting back to the partitioning of more than one list, if one takes all the meaningful use codes and all the Public Health codes you may have 3,000 codes and you still won't have most of what a doc would want. So it's very, very urgent to kind of keep a partition, because the other two codes have to take everything it might possibly come across to avoid unfairly punishing somebody or missing an important case. But 1,000, maybe 1,500 you can really cover the universe reasonably well for an awful lot of labs, but not for every single odd case.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Well and I think we're actually in violent agreement here in the sense that maybe there are these codes that we think are really important, but we have to recognize that there has to be a way that the system can gracefully manage a code that's unexpected.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

Absolutely.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

And, quite frankly, with Avian Flu outbreaks and things like that sometimes you very, very quickly have to add in a code that's important for people to be able to receive, and we may not have time to be able to predict that. We just have to have systems that will be robust that they can accommodate those things that are on the list and not break if it's not.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

Right. Yes.

**Betsy Humphreys – National Library of Medicine – Deputy Director**

I would certainly agree with everything that has been said. I think that a part of what we need as infrastructure is in the cases where people transmit what is a standard code, but it's not one of the ones, for whatever reason, was implemented in the local system in terms of meaningful use criteria or certification or whatever. That in effect there is a robust publicly available source where you can just send a message with that code in it and find out what it means.

**M**

So, Betsy, are you referring to if it's not in the convenience SNOMED set I'm still sending it with SNOMED codes so you could figure it out.

**Betsy Humphreys – National Library of Medicine – Deputy Director**

Yes. I think that at a minimum that needs to be a service that is publicly available to people. I mean obviously within some large systems they'll have their own method of handling that approach, but for the people who don't that seems like a minimum we would want to have available, and not hard to do either.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

So, Betsy, that's exactly the kinds of things that we need to identify in terms of providing the tools that will allow people to be successful in meaningful use stage two and have a robust system that kind of gets them on the escalator and moves them forward. For example, if you knew that there was a subset that you were to be tested against, and you knew that you also had to design a system that if you got something that wasn't in that subset you didn't break. And you knew that there were tools out there that would either help you with mapping or that would help you identify a code that wasn't part of your system. You could be much more confident in proposing that we're going to eliminate optionality and converge on a particular way of representing these concepts because you've sort of given people all of the help that they can to kind of get on that escalator. Then, over time, people will hopefully develop more robust ways of managing, storing, internally dealing with these things in sort of their native mode.

**Betsy Humphreys – National Library of Medicine – Deputy Director**

I agree with that.

**Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant**

May I ask a question that may take us a little bit off the entire conversation? But I saw in your bucket A where you indicated that yesterday or Wednesday in the Standards Committee that this we don't have to worry about because it's just attestation. If we're talking about performance measurement—or maybe I could expand that to any kind of repurposing data, whether it's Public Health reporting, etc.—and it doesn't have for all the categories of information you want to deal with some identified vocabulary to use, ideally with the context associated, then how do we know that someone's attesting to the right thing? Because I seem to think that that also is a piece of the Vocabulary Taskforce work is to make sure that whether it's quality measures, decision support, or other uses that there is for every category of information we need something identified as to what you use so we're not all over the place.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Well I think that's part of taking a look at that bucket A. It could be that there's already an existing standard to use and what we need to do is create kind of the certification criteria that helps test those goals or those policy objectives.

**Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant**

Okay. So what we tried to do in that NQF is define the types of categories, we call them concepts, that might be needed in order to express the kinds of information basically for measurement or decision support. So in prior rules many of those actually have no vocabularies recommended for them, so making sure we know which one could be used would certainly help those creating rules and measure development.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Okay. Good.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

What I wanted to try to do is to kind of steer the conversation back to the timeline for the overall summer camp activities, if you will. Doug, you had previously given us guidance that the use case or use cases around coordination of care really were the first priority. I wonder if in that context if we can perhaps go back, revisit to the degree necessary our previous recommendations, and make recommendations about the base vocabularies for coordination of care before then moving on to the somewhat thornier issues of the subsets and value sets that we may want to recommend and how those would work in certification criteria. So in other words, tackle the directional statements on vocabulary first and then figure out both how to select, maintain, manage, etc. both the convenience subsets and the value sets.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Yes. I think that outlines kind of a nice set of tasks for this group. I think one is to take a look at those previous recommendations and see to what degree we're on track, to what degree we can just sort of continue along that; maybe we accelerate it in some areas, maybe we get additional input and feedback around others. My own sense is the stronger we can make a directional statement and the more support we can help towards getting people to that direction the sooner we'll reduce optionality and the sooner we

can converge. So I think revisiting that and getting feedback and input and sort of a better lay of the land, I think, is really helpful.

Once those things are done, I think you're absolutely right, I think laboratory—and we're working in the S&I framework on sort of a laboratory results convergence across a couple of different implementation guides. Then the second piece being this transitions of care, which is going to be so critical and there are a number of different vocabulary options in there. Once we have some of that directional statement then we can actually dive a little bit deeper and start thinking about what are those subsets that would be appropriate. To Clem's point, what's the right way to do this; is it choosing 500 from 2,000, it is requiring 500 and the ability to test against ones that are not on that list, is it recommending 2,000 and having people responsible for any of those in those 2,000. It would seem to me that that's a nice series of progressions. One would hope that when we get to August we will have most of that taken care of. I think this group has done a lot of work in the past that as we pull forward the recommendations from two years ago dust them off, make sure that we're still on the right track, and that they still make sense. We should be able to refresh those, and that was really a big part of the charge for this summer.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

Hey, Doug, in light of that you brought up the issues of some groups developing lists of sets—and I've participated on some of them—could you define from your own perspective, say for the practitioner for ambulatory care. Is that constrains that laboratory to practice to referral labs to the practice or would it include a local hospital who they were tied to?

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Well one of the goals of the electronic labs results reporting initiative within the S&I framework is to really allow for sort of ambulatory outpatient clinics, as well as hospitals, to use a common way of exchanging information. So the package should look pretty similar across those.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

Okay. Because the little slight argument, well not argument, the difference is that the point of care things, which are blood tests, would definitely not be sent to a referral labs, I mean full blood tests. But if you were connected close enough to a hospital they often would do them; you would still order them and they would do them as point of care. So I was arguing for including some of those on, and you may give me some courage to go back again.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Sure. I think that the goal in that initiative is to come up with a common package so that we cover most of our bases across lab and ambulatory, and we have some people that represent public health as well, to try to figure out how that fits into that puzzle. But I think it's going to be absolutely critical that we also deal with the issue of these subsets, and it may be that this is an area in which there are of the 2,000 different subsets for ambulatory compared to in patient, but it's all part of that 2,000. So I think that's kind of the job of both this working group, but also I think the people that are actively involved in the S&I initiative, to try to tease those pieces apart. Because the folks on those initiatives are committed to implementation, and because of that commitment they tend to be very, very sort of boots on the ground practical in terms of well how can we make this implementable and how do we sort of focus our energies on the things that will give us the greatest value.

**M**

I think another little perspective on this, to me the value sets in the 2,000 versus 5,000 it's just a way of prioritizing work. My goal is to have everything that I keep or that I exchange with people be coded and structured. But to get a system up quickly I want to do the 300 things that do 99.9% of my work, and then I'll go on for a long time and I might even do them as they occur to match with the other things. So I wouldn't view it as like I do the 2,000 and then I'm done; I may do the whatever number it is before I bring the system live, and then I continue mapping probably for the rest of my life as new stuff happens and new codes are implemented. So it comes back to things that we said earlier; it means that at any point in time you have to have a system that's robust enough to handle a new test and be able to make it displayable, even though you don't have a code for it yet. But I think we look at it as, again, going back to

your analogy, Doug, it's a journey, it's not a destination; we don't ever get done with mapping or terminologies, it's forever.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

Yes, I think incredibly well said, and thank you. I do think that that's one of the reasons why I think the path, if this is a journey and not a destination, the path forward says listen I have 500 or I have 1,000 and I know about those, but if there's an Avian Flu outbreak we actually may need to create new codes that you've never seen before. Being able to both not break when you get that or to be able to have services, as Betsy described, that would allow you to accept it, put it in a spot where you could then associate it with the canonical codes, that becomes tremendously useful. It's this notion of providing some robustness to what we do so that if it's the 2,001<sup>st</sup> code that the system doesn't break, it in fact is able to continue to accept that information and display it or process it in a way that allows that information to be useful.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Let me get back to the, aside from obviously the many different discussions on subsets, let me get back to what vocabularies we might review and either reinstate or support or change our recommendations on. One is a problem list for care coordination. I'm just adding a little bit of color commentary, so it's not just problem list, but in fact it was problem list in the context of care coordination or transitions of care, lab results for lab result reporting to the ordering physician, orderable drugs, both drug allergies and non-drug allergies, units of measure, and immunizations. Now immunizations, I think, was done in stage one for CVX, but not with a particular subset. So we had made recommendations previously on all of those things. One thing on that list that I wanted to get folks read on is the recommendation to move to UCUM for units of measure. The issues with UCUM not being produced by all kinds of lab equipment, for example, and therefore while it is a representation that could be done in the EHR it's not always going to be present on the original report from the lab.

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

Jamie, you know UCUM I love UCUM. I think a couple of things just to add context. One is we recently looked at the units of measure we used within Intermountain, and I think 20 units of measure covered 70% of our total volume and 100 units of measure covered over 99.9% of our units. Because of that we use and espouse the UCUM strategy, especially when you're doing equivalents and conversions, but the way we actually implement it is we make codes for those things, because adding the ability to have a field that is the compositional expression is sort of overkill in a working system. So what we do is just make codes for those things for the ones that we really use and we slowly add if there's a new one that comes in. But we know the mapping from our internal code for that to the actual valid UCUM expression, which means that for any coded item we can then invoke the nice math and translation and normalization that you can get from the regularity of the UCUM coding system. It also allows you to do everything that you would like to do with terminology, which is make synonyms and allow for misspellings and all kinds of other stuff. I really like UCUM and I think we should adopt it that way, but give some people some hints about ways they can do it and it wouldn't be burdensome, because if really, again, 99% of what you do plus is covered by 100 specific codes.

**Clem McDonald – Regenstrief – Director & Research Scientist**

Can I speak to UCUM, too? I had something to do with its creation, but not a lot, so I just hope everybody knows. But we've just recently been looking at unit strings that come in HL-7 messages from it's about 100,000 distinct labs with their units and 23 different sources, and units are a blooming mess. They're almost a pile of junk when you look across what people are sending, and you couldn't do anything very automatic with them. So UCUM or something like it is really going to be important if we want to do serious computation on the results that come across.

The second thing is that there is some antipathy about UCUM from some quarters, and I think it's based on the fact that in some cases the string doesn't look like their common string, and this is especially true for pounds and inches and things. So I think if we push UCUM we should also assert that this is for communication, and then there's also a version of the UCUM string that is not perfectly computable, but it doesn't have the funny look that some people object to. So to reduce the objections one might have to

bring up that issue or let them send their regular old units along with the UCUM units.

Is there anybody from the lab industry on the call, because they're the ones that worry about the string look of some of the units? The metric units look just they would in regular writing.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

So again, I think one of the things that would be helpful in this group is to determine what's the 80/20 and what's the way that you can help folks that if you get a UCUM code that you've not seen before that you have a way of managing that and not rejecting the result.

**Clem McDonald – Regenstrief – Director & Research Scientist**

Well I think Stan's right. I think when you boil it if you get rid of—I mean we found I think there are 35 different strings that represent a million cells per micro liter. So when you boil it down to what the standard form would be I think it's close to what Stan just said; it's relatively a small handful. We could provide a mapping table from a lot of unit strings to UCUM, NLM, if you were interested with maybe a month of work. It could be used as a way to find things if you didn't know what it was, but I think most lab people would be able to just read them and know what they were.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

I just think given all the things that people are being asked to do the natural tendency is that people are going to pushback if they're being asked to do something that they think is going to be onerous. Part of being able to provide both strong directional statements as well as being able to reduce, make it more possible for people to be able to achieve the meaningful use, is, as you've sort of described. I mean if you can create the highest value subset and provide tools that will help people with that, and then also make sure that people don't break if they get something outside that range, it provides a very, very nice path that kind of makes it doable. It makes it possible, and it really starts directionally getting people in the right place.

So, Jamie, I think we're at time.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Yes we are, actually. Thank you. I lost track of that. Before we call a close to the meeting I had listed off what I thought were the main vocabularies that we needed to focus on, being problem list, lab results, orderable drugs, drug allergies, non-drug allergies, and units. Is that the right list?

**Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant**

Jamie, this is where if we are to specify more detailed elements within say measures or decision support we really need some direction on where to go for other categories of information. We don't—

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Right. So again, I think, and Doug correct me, but I think that our guidance from ONC is that our first consideration is the use of these vocabularies for care coordination and transitions of care.

**Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant**

So I understand. I guess I need direction from Doug, because at least for the domain I sit in without direction on which taxonomy or vocabulary to even start with that will create more confusion in terms of what to use. We can help guide if we know where to start with all the categories.

**Doug Fridsma – ONC – Acting Director, Office of Standards & Interoperability**

So that's probably a conversation that you and Tom Tsang and others within the Quality Workgroup probably should address. We're probably not going to solve that on this call.

**Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant**

No we won't. I had to bring it up, because it's a significant concern.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

So I think very clearly we have our work cut out for us. We have other calls being scheduled, right, Judy?

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Yes. Actually you have three on this group: May 5<sup>th</sup>, May 10<sup>th</sup>, and June 1.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Okay. Good. So I think that we'll be in e-mail communication, and we can probably do some prep work before the next call. I think that may involve looking at some of our previous recommendations and considering what we need to do so we can prepare for that call a little more fully in order to figure out our next steps for this list of recommendations.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Yes.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Is there anything else that folks want to bring up on this call before we go to public comment and closing?

**Stan Huff – Intermountain Healthcare – Chief Medical Informatics Officer**

Unfortunately, I'm going to have to leave, so I'm going to miss public comment. So thank you, Jamie.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

Thank you, Stan. Okay, Judy, let's call for public comment then.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Operator, can you please check and see if anyone wishes to make a statement.

**Operator**

We do have a public comment.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

If that person can please identify yourself.

**Carol Bickford – American Nurses Association**

Carol Bickford, American Nurses Association. During the conversation, there was significant focus on measurement of establishing the terminologies for the criteria for certification, but it seemed to me that we truly need to put the eye on the ball of the actual implementation and usability. That there should be a more robust inclusion of the larger terminology sets so that that's in place so that those who are looking at clinical practice, not necessarily marking things for measures, would be able to have a usability of the product.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Thank you, Carol. Any other comments?

**Moderator**

We have no more comments at this time.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Well thank you. Thank you, Jamie, and everyone.

**Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy**

All right. Thank you very much, everybody.

**Judy Sparrow – Office of the National Coordinator – Executive Director**

Good-bye.

## **Public Comment Received During the Meeting**

1. Please note that interoperable medication allergy recommendations are being evaluated by a NCPDP task group. A letter of recommendations is expected for delivery to the committee by early Summer, 2011.